WORLD HEALTH

THE MAGAZINE OF THE WORLD HEALTH ORGANIZATION MARCH-APRIL 1991

cities of tomorrow

Health in the city

by Dr Jean-Paul Jardel
Assistant Director-General, World Health Organization, Geneva

What will our planet look like 50 years from now? The shape of things to come will inevitably be defined by the breathtaking growth of the great cities, a contemporary phenomenon which is already a number one concern for the international community. The Technical Discussions, which traditionally take place at the same time as the annual World Health Assembly in Geneva, are this year devoted to the ways in which Health for All strategies can deal with all the problems of urbanization.

Since 1950, urban populations have grown at a furious pace and are expected to increase further in the next 35 years to the point where, in the year 2025, 5000 million people will be living in cities. In less than ten years, by the year 2000, no fewer than 24 urban agglomerations will each have over ten million inhabitants; five of these, including four in developing countries, will exceed 15 million.

People from the countryside migrate towards the towns, to the detriment of the quality of life there – since they are already bulging at the seams and unable to cope with such an influx; meanwhile the countryside itself is drained of its life-blood, and risks being left behind in the race for development.

In many countries, hasty efforts have had to be made to provide the urban populations with such vital matters as lodging, job opportunities, and social and health services. The public authorities often have to face insurmountable problems to deal with proliferating slum settlements, and to prevent any further deterioration of the environment as well as of health and social welfare. Such problems are graphically described in this issue of *World Health*.

Moreover, the concentration of productivity in cities – one extreme example is the case of Thailand, where 10 per cent of the inhabitants of Bangkok provide 80 per cent of the whole country's gross domestic product – means that a certain number of residents enjoy a far higher standard of living, and better health services, than is the lot of their rural compatriots or of their less-favoured fellow citizens.

Every possible effort has to be made to ease this gross discrepancy and bring about equity of access to services. In view of the complexity and the degree of interdependence of all the factors contributing to this situation, the primary health care approach and intersectoral cooperation combine to form the strategy of choice to confront these daunting problems.

Action at the local level is also to be encouraged to the full. The Healthy Cities project is one example of the efforts being made to convince countries to put health firmly on the political agenda of communities and local governments. Once again, it's a matter of "thinking globally and acting locally." Local action is by far the most effective approach, all the more so if it takes place within a national, regional and even a worldwide framework.

The interdependence of human beings with their physical, social and economic environment must now more than ever be taken into account in health-related activities. Local power to act must therefore be reinforced, and local authorities must be convinced of the important role of health in development efforts. Furthermore, all sectors that have an influence on health must be integrated into a collaborative team. The planning and carrying out of strategies must be flexible, to take into account the wide diversity of towns, countries and situations. Enlightened leadership is called for, to encourage the participation of everyone. And, finally, it must never be forgotten that Health for All is a common, shared objective, which alone can allow us to hope for eventual justice and equity in ensuring the fundamental right of every human being: the right to health. ■

What will the future hold for these little girls in Kathmandu, Nepal? Equity of access to health services can only be ensured if the local authorities include health in the political agenda.

Cover: People matter. Their health will depend on the willingness of city planners to meet their real needs.
WHO/J.-L. Ray

IX ISSN 0043-8502

World Health is the official illustrated magazine of the World Health Organization.

Editor:
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World Health appears six times a year in English, French, Portuguese, Russian and Spanish, and four times a year in Arabic and Farsi. The German edition is obtainable from: German Green Cross, Schuhmarkt 4, 3550 Marburg, FRG.

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Wanted: a redistribution of wealth

by Professor Jorge E. Hardoy

Director of the Latin American International Institute for Environment and Development, Buenos Aires, Argentina

All Third World areas are urbanizing so rapidly that by the middle of the 1990s the rural population in the Latin American region as a whole will decline in absolute numbers. The spatial redistribution of population of such magnitude in almost all Third World nations, for which there is no historical precedent, obliges us to ask ourselves whether the causes of these processes are only the result of an extended economic crisis, or whether we are immersed in a deeper ethical crisis – that of our entire civilization.

Trapped between a past which is unacceptable for a majority of the population and a future full of uncertainties, Third World nations are undergoing a crisis of collective and sectoral leadership. The world as a whole has a chronic incapacity to share comfort, power, time, resources and knowledge with those who need these things more. We are blindly passing to the future generations urban environments which are rapidly deteriorating and cities so populous that the options of future generations will be severely circumscribed.

All Third World nations are becoming increasingly urban, and the city sprawl now encroaches on ecosystems which were sparsely settled only one or two generations ago. Cities founded hundreds of years ago are suddenly expanding so rapidly that the equivalent of a new city is built every 15 or even less years on their periphery or over the old districts. A comparatively new city, such as Goiania, planned in the 1930s, has now close to two million inhabitants, and Brasilia, inaugurated in 1960 as Brazil's national capital, has already nearly 2.5 million citizens. Places that were small villages a century ago, like Lagos and Casablanca, now have around five and three million respectively, and Belo Horizonte, founded in the 1890s, has now close to four million. The population of Seoul has jumped from 3.8 million in 1966 to over 11 million in 1990. Some 61 agglomerations in Africa, Asia and Latin America, which had 500,000 inhabitants or more in 1990, will add 100,000 new dwellers or more each year during the present decade.

New challenges

The problems created by these changes are so staggering and their scale is so vast that they have outdated all approaches to planned urban growth even before they could be put into effect. Planning methods, the technologies adopted, the search for basic data, the role of institutions, the scope of legislation, the training of personnel in public institutions, and even the selection of research themes, all have to be reconsidered again and again to deal with challenges for which

WHO/Zaki

there are no precedents.

The director of planning of a metropolitan area in Latin America with 6.8 million inhabitants, whose average population growth during the 1990s is expected to be 236,000 each year, recently asked me: "How can you plan, build and manage an agglomeration with such characteristics when the investment capacity of the local government is US$2 per capita per year and that of the central government is US$10 per capita per year?"

This is not an isolated example. Practically all Third World cities are being built with such scanty investments that no one can be surprised to see huge numbers of poor families and a growing pool of unemployed.

We cannot prevent the growth of cities in any significant way, but we can improve their qualitative aspects if we learn to manage better the misused and unused resources that every nation and every city has: public lands in urban and suburban areas, with many centrally located but empty plots and unoccupied buildings; large numbers of unskilled or poorly trained and motivated employees and technicians working for local and national governments; environmental legislation that is sanctioned but seldom enforced; and, above all, the community bodies and nongovernmental organizations that operate in every city of a certain size. Governments can initiate projects and programmes by using these resources, which only await political decisions in order to be harnessed to the construction and management of cities. Governments must accept the idea that cities can only be built with the resources that national and local groups provide.

Multilateral and bilateral agencies have little influence in these processes. They influence housing and urban development policies in nations with small budgets, but the total funding provided for basic needs and urban development is almost insignificant in relation to the detected needs: $3700 million for joint water and sanitation projects for the entire Third World between 1980 and 1987 (at 1985 constant dollar value); $3400 million for water supply projects alone; $1200 million for sanitation projects; $1000 million for integrated community development projects. An estimate for the annual flow of multilateral and

An elegant street in Tokyo (left) and a destitute suburb in Thailand (right). Educating the rich and powerful élite about the needs of the poor is one of the soundest investments for a better future. Top: *Growing old in Santo Domingo, Dominican Republic. As urbanization gathers pace, vulnerable minorities will more than ever need support.*

WHO/Zafar

A family from the countryside collects garbage from the streets of Cairo, Egypt. Many countries see their rural population dwindling as they migrate to the large cities in search of a job.

bilateral aid for basic needs and urban development is between $3000 and $4000 million, while Third World societies may be investing $150 000 to $200 000 million in the same activities – a figure which does not include the time and savings employed by the urban poor, year after year, in improving their homes and shelters. Multilateral and bilateral agencies could also substantially improve the efficiency of their projects and programmes through some badly needed inter-agency and intersectoral coordination. Aid for basic needs and urban development projects remains a very low priority for most of these agencies.

While governments have less and less influence in these processes and seem to be paralysed by their magnitude, the readjustment policies introduced in many countries to stop inflation have considerably reduced the public expenditure and subsidies for social services and food. Besides, the urban poor in the Third World who have no organizations to claim their rights have benefited little or not at all from the actions of governments and international agencies and – given their extreme situation – they feel vulnerable and fear retaliation and even repression.

Basic needs

The incomes of such groups are unlikely to increase to a level where they will be able to satisfy their own housing and basic needs within the private sector. And it is doubtful that in the next 10 or 20 years the city will become so prosperous as to have an impact on their incomes. Already 600 million people – half of the urban population – are living in habitats which constitute a threat to their lives.

Only a redistribution of wealth, worldwide and nationwide, could

transform these cities. But Third World nations cannot remain idle waiting either for these changes or for a slowdown in population growth. Educating the rich and the powerful about their responsibilities towards less fortunate members of mankind is perhaps one of the soundest investments I can think of, if the purpose is to seek a world of equity, justice and peace.

Every society at a given historical moment must have the courage to innovate, move forward, and even overthrow traditional precedents. Quite the worst effect of present policies is the support given to the elitist urban minority who in many countries deprive the rest of the population of their rights as citizens of democratic nations. Perhaps the first step should be to change the attitude of governments and for profiteers, squanderers and tax evaders to be punished severely. A series of positive signs from governments and from the business, labour and academic communities showing that they *are* concerned about their cities and about the urban poor could be a beginning. But it would have to be followed right away by the government granting to local authorities and community bodies the resources and the political power which at present are almost systematically denied to them.

The following suggestions could help to alleviate the situation in the cities of the future:

– Since there can be no reversing of present urbanization trends, the governments, big businesses, the churches, labour groups, the international community, and nongovernmental organizations must prepare new approaches to bring food, health and minimum incomes to a vast number of people, especially the children, to households headed by women, to the crippled, and the elderly – those who are the most vulnerable groups.

– Poverty and lack of planning are now shaping future cities, but until such time as the causes of poverty and its worst effects are overcome, we can introduce some broad physical guidelines and economic and social strategies in order to guide urban growth and future land uses.

– Big projects are needed to improve and expand the infrastructure, but they are not the solution; a multiplicity of well-selected and coordinated small-scale projects, with the participation of the communities, could represent a step forward and would certainly be a better alternative to practices that have hitherto failed. ■

Rapid growth in the Americas

WHO's Region of the Americas is witnessing a particularly rapid process of urbanization. In 1985, this region had an urban population of 475.3 million (71.1 per cent of the total of 668.4 million, a similar percentage as in Oceania).

By the year 2000, the Americas will have moved to second place in the world, after Europe which is the most developed and urbanized region of the world. But while Europe's city-to-countryside population ratio will remain stable, that in the Americas will rise to reach first place by 2025, when 83 per cent of the population will live in the cities.

A closer look at the forecast for the year 2000 shows that the total population will have risen by an additional 163 million. Of these, about 136 million will have settled in the urban areas – specifically 32 million in the Andean region, 12 million in the "southern cone" of Argentina and Chile, 50 million in Brazil, nine million in Central America, 28 million in Mexico, six million in the Spanish-speaking Caribbean, and 27 million in North America and the English-speaking Caribbean.

Latin America will experience the highest increase in urban population in the Region; from 70 per cent in 1985 it will increase to 76.4 per cent in the year 2000 to reach 85 per cent in the year 2025 (well above North America, which will only reach 78 per cent in the year 2025). Besides having the 11 highest urban concentrations in the world which in 1985 had more than 10 million inhabitants, Latin America includes the two cities Mexico City and São Paulo, which will grow far faster than the urban centres of more developed countries such as Tokyo, New York, Los Angeles and London.

In 1985, five cities accounted for more than 40 per cent of the urban population within their own countries: Buenos Aires (Argentina), Santiago (Chile), San José (Costa Rica), San Juan (Puerto Rico) and Montevideo (Uruguay). In the year 2000, São Paulo (Brazil), Santo Domingo (Dominican Republic), Asunción (Paraguay) and Lima (Peru) will be added to this list. Among the fastest-growing cities, São Paulo and Mexico City will have an additional eight million people each.

Given the marked differences between the rate of population growth and the supply of basic services and housing, existing social and economic problems will become more acute. Housing will be more crowded, slums will deteriorate and the lack of basic water and waste disposal services will be critical. This situation will have a direct impact on the health status of the inhabitants.

Planners need to start thinking *now* about how to ensure access to health services, not only for those who actually live and will live in the cities but also for the forgotten population groups in rural areas. Changing life-styles will make it necessary to focus attention on complex health problems since, even though communicable diseases will persist, new needs will arise in such fields as occupational health, disease and crime prevention, and environmental sanitation.

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Like many other cities of the Americas, Caracas, Venezuela, is expanding rapidly. The authorities face the challenge of bringing good health care to all its citizens.

WHO/ Zafar

Street children

by Mrs Victoria Rialp

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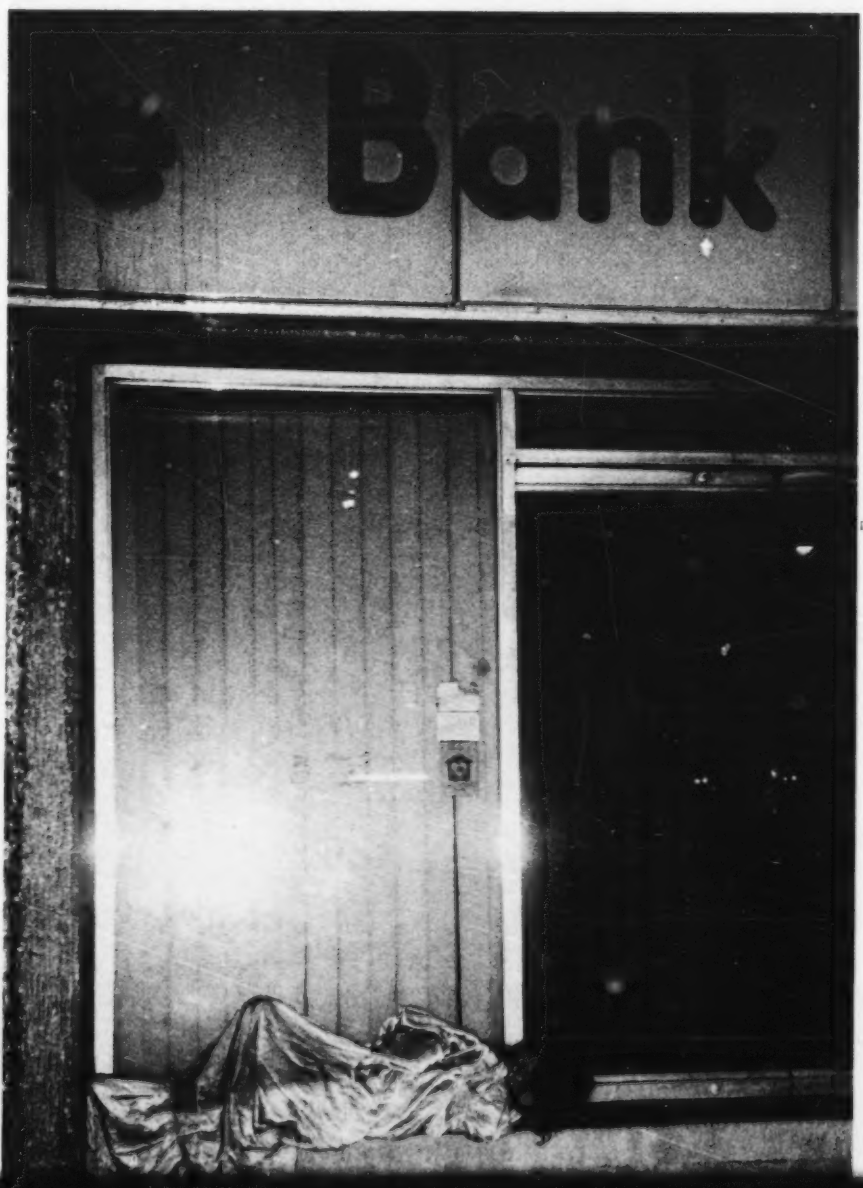
Like many poor girls from Caratinga in the state of Minas Gerais, Brazil, 14-year-old Ana worked in family homes as a maid-servant, taking care of the children. The little that she earned helped her parents to support six younger siblings and eight other children from her father's first marriage.

She does not hide her resentment towards her father. "At times I feel so much hatred for him," she says, remembering the beatings she and her mother so frequently received from him.

At a nearby cinema, Ana met a 33-year-old man from Rio de Janeiro who had worked in the ports as a stevedore; he bore tattoos on his arms and was full of stories. She fell in love.

"I met him in March. I lost myself in April," she confesses. She fled to Rio de Janeiro with her lover. They slept on the beach or in the city's plazas, and went hungry. Until one day one of her lover's friends came up with an idea: "Why not throw her into *the life*?" Already in the early stages of pregnancy, and with no other options, Ana agreed.

The bank houses the wealth of the few; its entrance offers a place to sleep for one of the many. Homeless children in the cities of the Third World are counted in their thousands.



WHO/Zafar

"I earn the most among everyone else hereabouts," she boasts, eyeing the other women leaning against the walls and parked cars along Marrecas Street in downtown Rio de Janeiro. "The men prefer younger girls and I am among the youngest around here," she explains.

Pretty, wearing no make-up and dressing discreetly, Ana stands out from the other prostitutes. She does as many as eight "programmes" in a day and prefers older customers. Her "companion" does not work and exercises strict guard over her. As her pimp, he keeps part of her earnings in exchange for her "protection". She says she wants to marry him, bear children, and return to Caratinga to a small house she plans to buy with her savings.

As in the comic-book romances that she likes to read, Ana believes it is possible to "forget the past and live happily ever after."

* * * * * *

Silvia Aparecida dos Santos (who says she is 16 but looks younger) is one of the children who roam about Cinelandia, a downtown district of Rio. She lives more than two hours away by train in the squatter area of Santa Cruz, in a small hovel which she shares with four younger sisters and her mother, a domestic worker. The money is not enough to support the family, and because of this, the five girls travel to Cinelandia every day to sell candy. While she works, Silvia looks after her four little sisters, a tiring job in itself.

In spite of everything, Cinelandia holds its attractions for Silvia. There she meets her boyfriend Marcelo, 14, who sells roasted peanuts. He lives in a shack in Niteroi with a friend of his mother's, but does not like talking about his mother. "She drinks and is always roaming about" is all he says of her. Marcelo does not know his father.

* * * * * *

WHO/UNICEF/P. Tacon

One of the world's "street children", this little Brazilian can only dream of going to school and finding a real job.

"She left one night, in secret, and didn't even say goodbye." Paulo Cesar Soares, 11, better known as "Ica", remembers his mother, who walked out on her husband and six children. At home – a shack with beaten soil for a floor – Ica shows the simple checkered dress that she left behind. He spends his days selling candy at street corners, as he has done for almost a year now. After a day's work on the sidewalks of Avenida Brasil, which connects the districts of Pinheiros and Ibirapuera, the four brothers turned over their meagre earnings to their unemployed father Luis.

When hunger comes upon them, they eat bread or they beg for food, knocking on doors of the richer homes in the Jardim America.

On the return home, two things worry Ica: being robbed by other young boys, which has happened many times, and confronting his father's fury when he is unable to sell enough. Ica does not know how to read or write, although he went to school until second grade. He wants to go back to school and dreams about, one day, finding a better job.

* * * * * *

These life stories and scenes were published in the journal *Retrato do Brasil* a few years ago. Similar scenes and stories are played over and over again in the city streets of Brazil and of other rapidly growing cities in Latin America, Asia and Africa. These street children have a strategy for survival – not only to keep themselves alive, but more often than not to help support their entire families. Many come from large poor families, and as many as one half are from one-parent households or broken families. As a rule, however, most children working in the streets maintain constant ties with their families.

They spend long hours on the streets – selling what they can, cleaning or guarding cars, shining shoes, begging, scavenging through garbage, carrying baggage – but earning little from their efforts. Those who resort to picking pockets, selling drugs, or selling their sexual favours earn considerably more. Some divide their time between work and school activities. Although their earnings go mostly to buy food for themselves and their families, sometimes the little extra they bring in pays for their school needs.

All face a variety of hazards on the streets – harassment and brutality from policemen or from youth gangs, susceptibility to disease due to exposure, chronic hunger, and physical injuries from traffic accidents. Many take to sniffing glue to forget their hunger pangs or to escape the harsh realities of their daily struggle.

Living in fear

Some suffer deeper exploitation by other people who trick them or persuade them to engage in drug trafficking, prostitution and other criminal activities. Children on the streets meet with violence constantly and live in fear of being hurt by adults or other young people, even of being killed by them.

As children have become more visible in the city streets of Brazil, as well as in other cities of the developing world, public concern has also grown. The apathy and fear, which in the past justified clearing the streets of vagrant children and putting them out of sight in institutions, are gradually giving way to a better understanding of the serious economic and psychosocial factors which compel children to take to the streets.

In Brazil today there is an identifiable network of at least 400 programmes and groups which specifically aim to serve (however incompletely) the needs of children who work in city streets. These groups form the backbone of the National Movement of and for Street Children in Brazil. They provide education and training opportunities for street children, approved jobs, basic medical services, food, and shelter. More importantly, they provide the caring and protective human relationships and a safe environment, which street children are deprived of and which they constantly seek. Similar programmes are rapidly increasing in other countries among those who seek to protect and assist such youngsters.

In Brazil, street children have come to know and value the person of the "street educator" – usually the first person they learn to trust and through whom they are gradually able to receive affection, protection and, later on, to enjoy opportunities for play, for schooling and learning life skills, as well as other services that the government and nongovernment groups and agencies have to offer. At an Asian conference on street children in May 1989, some 20 children from the streets of Manila summarized what they liked best about the street educators they knew. They reported the following:

We like a street educator

– who is a friend, who is sympathetic and shows affection

– who is a source of encouragement,

WHO/D. Ponte

Glue-sniffing in Colombia: a negative and destructive way of forgetting the pangs of hunger.

WHO/J. Hernandez Claire

Information on AIDS in Mexico City. The "street educator" is often the first person whom street children feel they can trust.

protection and inspiration
– who gives immediate service
– who knows self-defence
– who spends time with us playing, sleeping, working . . .
We like an approach
– that is non-threatening, sincere
– that is relevant
– that protects us from the police and other sources of harassment
– that provides food when we need it
– that gives importance to what we can do.

A more comprehensive, prevention-oriented approach to the phenomenon of children living and working on city streets is being applied in such countries as Kenya, Philippines and Mexico. Programmes which started out specifically geared to addressing the special needs of street children are increasingly tied in with urban community development programmes which seek to address the basic needs of poor families living in the big cities.

The Undugu Society in Kenya, for example, has since 1973 offered residential care to street children, but has evolved into a comprehensive urban community development programme assisting families in the slums of Nairobi. Its programme includes alternative "community schools" for children living in the slums; school sponsorships for children who wish to enter the formal primary and secondary school systems; an urban agriculture project which helps children who have come off the streets to learn and earn a livelihood; a community health centre that includes primary health care, family planning and AIDS prevention; and a housing assistance programme that has improved more than 1000 slum dwellings.

Back to the community

"We decided the best way to deal with the issue of street children is to address the problems of families living in urban slums," says Ezra Mbogori, director of the Undugu Society. "We are emphasizing a process that reintegrates kids into their communities. We are trying to get the community to take responsibility for these *parking boys* (street children) in keeping with African tribal traditions. We tell them: 'You're the guardians of these children. Why on earth are you letting them live like this?' We give the responsibility back to the community. We view all street children primarily as victims of poverty. We constantly have to think of creative ways to give the down-and-outs of Kenya a chance."

The task of tackling the root causes of the street children phenomenon is high on the agenda for the next development decade. Many place this task within the context of the newly promulgated Convention on the Rights of the Child. Brazil is among the countries in the forefront, thanks to a strong coalition of citizens' groups in defence of children's rights. Specific provisions are guaranteed in the new Brazilian Constitution and in State-level and municipal legislation to promote and protect children's and families' rights. Brazilian street children have over the past few years organized themselves as an integral sector of the National Movement for Street Children, and have missed no opportunity to make their views and expectations known to the nation. ■

The present is appalling, the future bleak

by Dr Robert J. Maxwell
Secretary, King Edward's Hospital Fund for London

When, in 1978, WHO formally adopted primary health care (PHC) as the "leading edge" strategy for improving health, it rightly mentioned both rural and urban development. But the accent initially was on rural health, and there it largely remained until very recently. In view of the suffering and starvation that are endemic in many rural areas, and the havoc wrought by drought, by war and (all too often) by Western economic policies, the accent on rural priorities is entirely understandable. Less justifiably, the almost exclusive preoccupation with rural health problems may have had something to do with the skills and preoccupations of international health experts: infectious diseases provided precise targets for specialist marksmen to shoot at, with solid bullets.

Traditionally, people have thought of city dwellers as relatively prosperous and privileged. Average incomes are in general much higher than in rural areas. Health indices appear better, though this may be an illusion. More certainly, medical resources are heavily concentrated in the cities, especially in poorer countries.

Interdependence

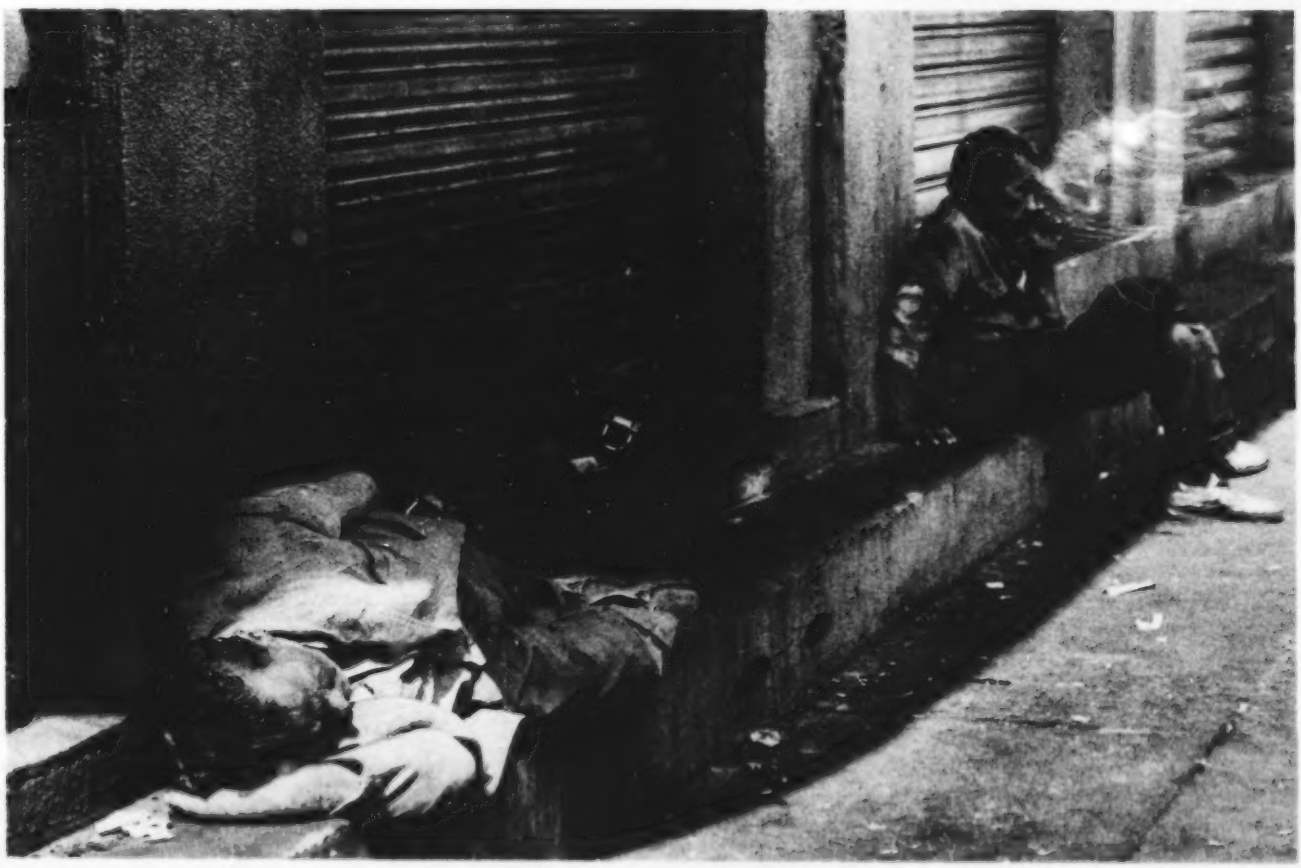
Arguments about whether the position of poor city people is better or worse than that of the rural poor are pointless. This is not a matter of "either/or". Indeed there are strong interdependencies between the two. There can be no healthy city without a healthy countryside, for city populations on their own cannot feed themselves. Equally, rural destitution is bound to fuel continuing migration into the cities, making the position there even more difficult.

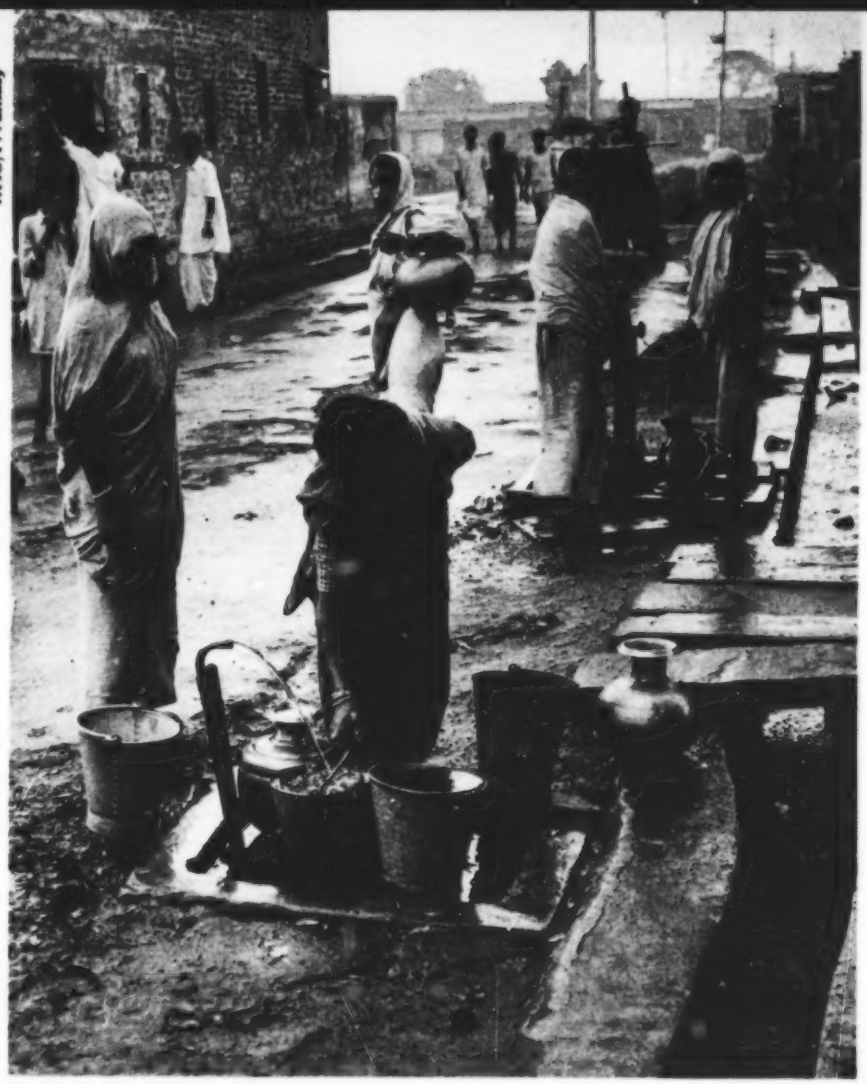
Nevertheless the health of the urban poor is increasingly a matter for concern and alarm. Often the true facts are hidden, e.g., urban health statistics describe averages rather than extremes. Moreover the poorest of the poor are often secretive and therefore do not appear in official statistics. Frequently they have no legal status, since they may be squatting illegally, and are very wary of any form of reporting to official bodies, even supposing that the latter show an interest in them.

When we do have information about the health of poor people living in cities, the facts are alarming, for they often combine the problems of rural poverty (malnutrition, infectious disease) with those of urban development (environmental pollution, violence, sexually transmitted disease, cardiovascular diseases and so on). The poorest of the urban poor seem to endure at one and the same time the effects of poverty and the worst by-products of industrialization and

No home to go to: a scene in Venezuela. The poorest of the poor tend to keep a low profile; their lives usually go unrecorded.

WHO/Zafar





WHO/P. Almasy

How safe is the water in these city taps in India? Safe water is the first key to better health in the Third World.

urbanization.

Yet the urban poor are largely unseen and unheard. Thousands of them may be homeless but they carefully avoid official contacts and investigations because they distrust the motives of the enquirers. Quite rightly so, since the poor have much to lose and little to gain. Typically too, the urban poor are dispersed and mobile. You can actually live in many cities without realizing their presence. Relatively affluent young people simply do not see or hear the poor who are their neighbours, because they do not share their daily experiences.

Megacities

All this is made more serious and urgent by the world trends in urbanization. The population of urban areas is growing much faster than that of rural areas. At the time of the Alma-Ata Declaration on primary health care in 1978, around 30 per cent of the world's population lived in cities. By the year 2000 the proportion will, for the first time in history, be more than half, reaching two-thirds by around 2025. Much of this growth is in the cities of the developing world, where the rate of increase is four times that in the rural areas. By the year 2000 there will be 60 megacities of over five million people each, of which no fewer than 45 will be in the developing world, compared with just one in 1950.

A high proportion – on average about half – of this urban population in the developing regions live at the level of extreme poverty, and this proportion rises to about two-thirds in Calcutta and around four-fifths in Addis Ababa. For the homeless of all ages in these areas, for young families living in conditions of squalor and danger, for the street children, the present is appalling and the future bleak – a situation that seems all the worse because of the visible prosperity in neighbouring areas.

Unless PHC is made as relevant to the inmates of the shacks and shanty towns of these cities as it is to the rural

The present is appalling,

population, it will be failing a large and rising share of the world's poor. For the moment, however, the record of success in cities is limited and is based mainly on relatively small-scale projects. There are few examples of robust, city-wide PHC networks that live up to their intent, whereas there are excellent examples at the project level.

The fact that medical and other health care resources are heavily concentrated in the cities does not help the poor. Hospitals may be excellent in their own way, but their strength is not usually in their outreach. They are almost overwhelmed with the cases that come to them directly or through referral. In many instances, access to the hospital will be least for the poorest section of the community. Nor is a hospital necessarily what they need. Yet if a special effort is not made, these are the very groups most likely to lack good, locally-based physicians and other health workers, and local self-help organizations.

The basic principles of PHC are of course the same in the cities as in the rural areas, though the conditions, the constraints, and the ways of applying it may be markedly different.

Who are the poor?

Community focus and community involvement are crucial. The first step is to find out, at least in broad terms, who the poor are, where they are and what they want by way of external help and support. Action from outside the communities themselves, however well-intentioned, will simply not work on its own. Because urban communities are often heterogeneous, without stable social structures, community development may well be crucial in promoting urban PHC and will need skilled and sensitive external help.

Community-based programmes must be low cost, concentrating on effective technologies and building on what people can do for themselves. Many of the proven instruments (such as oral rehydration solutions for diarrhoea, or immunization) will be the same as in rural areas, but there may well be differences in the manner of delivery. For example, because cities are largely dependent on a cash economy, some form of wage for community health workers may be more essential than in the countryside.

Initiatives in poor neighbourhoods should be accepted and supported by existing health institutions and authorities. Because many of the most urgent health needs are in these areas, it is

WHO/Zafar

A busy street in Yangon, Myanmar (formerly Burma). Transport, as well as safe water, good sanitation and employment, can be as important as conventional health services for improving people's health.

indefensible for city health departments and major institutions, including medical schools and universities, to turn their backs. Political backing at the highest level in the city and in central government is crucial for redirecting scarce resources.

As in rural areas, all sectors must participate for effective action. Water supply, housing, transport, sanitation, and employment are all at least as important as conventional health care services. The activities of all these agencies overlap with those of the health services. However, they may depend on different political authorities (e.g. national, provincial or city) and will certainly be administered by different departments. So these agencies will need as much persuasion as the health institutions that the poorest neighbourhoods are no less their responsibility than the more prosperous neighbourhoods of the city.

Monitoring the impact of what is done is crucial, so as to assess changing needs and to redirect efforts towards what really works. The problems of the urban poor are far too great and too complex to be "solved" quickly. It is a matter for the long haul, and that means sustaining the impetus for action and continually finding better and more effective ways of conducting the campaign.

The position of many people in the world's cities is desperate but it is not hopeless. Primary health care in an urban setting can provide the instruments that will enable these people to help themselves. ■

Floods threaten the world's cities

The worldwide debate over planetary warming has resulted in two major international conferences, the latest being the one in Geneva in November 1990. That meeting brought to light some disagreement between the developed countries about limitations to the emissions of carbon dioxide – which come principally from the exhaust gases from motor vehicles. Many scientists consider this gas to be a prime cause of global warming.

Two of the major evils which would stem from such warming in the coming decades would be an expected increase in the sea-level and the consequent risk of flooding.

However, the factors that contribute to this risk are far from being clearly understood. As Nigel Hawkes, science editor of *The Times*, pointed out in a recent article, several different factors have combined to increase the dangers of flooding. A rise in temperature of about 0.5°C has caused the waters of the world's oceans to expand. Receding glaciers and possibly melting ice-caps have added to the volume of water, resulting in a rise of some centimetres over the past century.

According to Dr Robert Kay, one of the authors of a report published by the University of East Anglia in the United Kingdom, many of the world's greatest cities, with a total population of at least 500 million, are already at risk from chronic flooding *whether or not global warming ever takes place.*

Dr Kay named among these cities vulnerable to floods Shanghai, Bangkok, New Orleans, Alexandria, Leningrad, Hamburg, Venice and London. All of these stand beside rivers, on estuaries or on low-lying land, sometimes barely above sea-level. In addition, many cities are actually sinking, either because of natural land movements or because so much water has been pumped out from the water-table lying below them. According to the report, the sea-level at Venice has risen by 23 centimetres in 50 years as the water beneath the city has been pumped out. In London, the reverse situation has arisen: the decline of heavy industry and of brewing of beer has so reduced the extraction of water that the water-table has started to rise by one metre per year, threatening to flood sections of the underground railway system and damage the foundations of buildings.

According to Dr Jim Titus, of the United States Environmental Protection Agency, traditional methods of civil engineering to combat flooding could actually make some situations worse. Fifty years ago, the US authorities installed along the Mississippi River a system of levees (embankments) considered at the time to be the most efficient in the world. But while each section of this project has performed well, the overall result has been disastrous. Each year 40 square miles of marshland on the edge of the river's huge delta is taken up by the sea.

By containing the floods, the levees also prevent rainwater from draining into the river, creating fresh flooding along the banks. And the increased river flow washes sediment far out to sea instead of allowing it to settle in the delta, which now no longer acts as a natural buffer between land and sea.

It is hardly surprising that some critics have strong reservations about a huge flood control system aimed at preventing the catastrophic floods that regularly hit Bangladesh, lying as it does in the world's largest delta, that of the Ganges and the Brahmaputra. Some people feel that the scheme, to be financed by the World Bank and costing up to US$ 10,000 million over 20 years, might in the long-term do more harm than good.

According to Dr Kay, whatever emerges from the debate about global warming, new measures to combat flooding are urgently needed. "If we had decent policies in place, we would reduce the hazards whether or not there are sea-level rises in the future," he says.

The entire international community, which has long been engaged in the battle to defend and improve the environment, will intensify its efforts still more in the coming years. The UN General Assembly last year approved two resolutions calling for an International Decade for Natural Disaster Reduction 1990-1999. And in June 1992, 20 years after the big UN Conference on the Human Environment in Stockholm, a major international conference in Rio de Janeiro, Brazil, will examine the state of the environment.

WHO itself is playing an important part in the efforts being undertaken to safeguard our planet. Last year, the theme of World Health Day (7 April) was: "Our planet – our health: think globally – act locally." This year, World Health Day, and indeed the entire year 1991, will mark the theme: "Should disaster strike – be prepared!"

Miss Diane Rotman
Freelance journalist based in Geneva, specializing in environmental matters.

Tackling Africa's slums

by Dr Layi Egunjobi

Director, Centre for Urban Planning and Regional Planning, University of Ibadan, Nigeria.

The rate of urbanization in the less developed countries over the last few decades is far higher than that in the more developed countries over the past hundred years. In Africa, particularly, most of the urban populations are concentrated in just a few cities. And the urban process is largely unplanned in both physical and social terms.

Inevitably this results in the uncontrolled physical expansion of the cities. City growth has leapt far ahead of city planning and management, to the point where development of structures and activities in the cityscape is simply haphazard. In the older "core areas" of city slums and in the relatively new built-up areas, the scene is one of overcrowding, lack of access roads, scarcity of drinking-water, ramshackle buildings, uncollected garbage, lack of sewers, inadequate air-space, and a housing environment littered with human faeces. All of these are conducive to the spread of tuberculosis, pneumonia, influenza, threadworm, cholera, dysentery and other diarrhoeal diseases.

Just as intensive planning activities prevent diseases and promote health, so the lack of planning, or its inadequacy, breeds diseases and contributes significantly to a high rate of mortality, especially among children.

From ancient times

The relationship between urban planning and health was known to the ancient Greeks and Romans, who promoted the orderly arrangement of houses and streets and the provision of water as a means to prevent diseases and to control them. More recently, in the United Kingdom, concern for the health of people who crowded into the major cities during the industrial revolution gave rise to housing regulations which evolved into public health regulations, and eventually became the town and country planning laws. In Nigeria, modern town planning activities were triggered by bubonic plague which hit Lagos in 1924. Besides the immediate measures taken such as disinfection, removal of patients to the infectious diseases hospital and campaigns to wipe out rats, the epidemic brought into being the Lagos Executive Development Board, which pioneered the development of new housing estates after demolishing some of the worst slums.

The pre-colonial settlements in Africa evolved without any conscious planning as we know it today. Compounds and houses were built with paths radiating from the centre, and vehicles were unknown. During the colonial period, Western concepts about the design of cities were introduced side by side with the traditional situation. Most African cities still remain traditional in form and character.

One result is that an industrial plant generating fumes and excessive noise may be situated in a residential area, with serious implications for the health of the people living there. In Ibadan, Nigeria, the two main waste disposal sites currently in use are already surrounded by residential development. Apparently the sites were selected in the early 1930s when Ibadan was a much smaller city. With

Will life really improve for this African child when the family moves to the neighbouring city?

WHO/UNICEF/OHM

appropriate urban planning, these waste disposal sites would have been relocated well away to prevent pollution of the city.

In cities like Kano, Lagos and Ibadan, a substantial proportion of houses cannot be reached by motor cars and refuse collection vans. Household wastes are dumped on any available open spaces or in drains. Heaps of garbage are therefore common sights, and serve as breeding places for disease-carrying insects and rodents.

Inadequate roads

At the same time, those areas of the cities that *are* served with access roads of some sort are well known for their high rate of accidents. This is another public health problem resulting from unplanned urban growth. Traditional pathways are unsuitable for motor traffic, since they often retain some of their original features of narrowness, dangerous curves and unpaved surfaces. Urban planning principles demand that roads should be laid and other essential services installed before house construction starts. Many lives are lost and many are injured in African cities because of the defective road system. Children are specially at risk because, without playgrounds, they are obliged to play in the streets.

Another source of accidents is the high rate of collapse of buildings. In Nigeria alone, hundreds of lives are lost each year when homes fall down. In Port Harcourt recently a two-storey school building collapsed and killed several pupils, while scores of others were seriously injured. Such accidents are mainly due to lack of control by planners, engineers and architects, which means that developers feel free to flout the relevant planning and building regulations.

Unplanned urbanization has also led to inadequate water supplies. In Dar es Salaam, for example, 47 per cent of the population have no piped water supply either inside or immediately outside their houses. Many other cities are in this position.

Hardest hit by the lack of drinking-water are the inhabitants of the spontaneous slum settlements that develop on the city outskirts. Such people rely largely on streams, brooks and shallow wells for their daily water supply, and these sources are frequently polluted. Where there is a piped supply, it is rarely adequate. In Ibadan, the taps may not run for a whole week; it is not surprising that the incidence of typhoid has been increasing in the past few years.

WHO/M. Jacot

Recently arrived from the countryside, these people are starting a precarious city existence in a poor neighbourhood of Dakar, Senegal.

Owing to unplanned urbanization, there are inadequate sewage systems in Lagos, Ibadan, Kinshasa and Dar es Salaam. People largely depend on individual septic tanks, pit toilets and undeveloped open spaces. It is not uncommon to see children and even adults defecating in open spaces in the worst slum areas. This helps to create conditions favouring the spread of typhoid, hookworm, dysentery and diarrhoeal diseases.

Overcrowding also encourages the spread of diseases. As long ago as 29 November 1884, the *Nigeria Pioneer* noted the link between smallpox incidence and overcrowded housing in certain districts of Lagos. Although smallpox has been eradicated worldwide, overcrowding encourages the spread of other diseases like measles, mumps and tuberculosis, all of which are easily transmitted through person-to-person contacts.

Newly developing areas often do not conform to regulations aimed at ensuring that buildings are sited in well-drained areas. If they spring up in areas liable to flooding, this may encourage the spread of the vectors of malaria.

A recently completed study on Ibadan clearly reinforces the link between urban planning activities and public health conditions. Government residential areas and a few other housing estates of the city where urban planning is active enjoy better environmental conditions. By contrast, in the extensive traditional areas and the new suburban slums, where there are few or no development control activities, the quality of the environment is very poor.

WHO initiative

Unfortunately the prevention of diseases and the promotion of health do not figure high among the major concerns of urban planning. It is against this background that WHO took the initiative through its *Environmental Health in Rural and Urban Development Programme* to stimulate awareness about the association between planning and health, and to offer appropriate guidelines. This is an initiative that should be fully adopted in the less developed countries, particularly in Africa. Planners today should consciously start to emphasize the health implications of planning in urban development programmes. And they should be prepared to meet the challenges of urban decay and uncontrolled sprawling by applying the strategies of rehabilitation and upgrading of sub-standard housing, while keeping health as the central focus of attention. ■

Cities of tomorr

WHO cartoon by Claude Kirbe

Less than ten years from now, no fewer than 24 of the world's great cities will have more than ten million inhabitants each. Five of these – and four of them are in developing countries – will have passed the 15 million mark. Even the cities that will not reach these staggering dimensions are undergoing such rapid growth that they seem to be heading for catastrophe. Hasty efforts are under way to provide for the needs of city-dwellers, whether in matters of housing, job opportunities or social and health services. Yet once again we face a situation where only a minority of the inhabitants are able to enjoy an acceptable standard of living. It follows that every effort at health promotion must be aimed at narrowing the gulf between rich and poor.

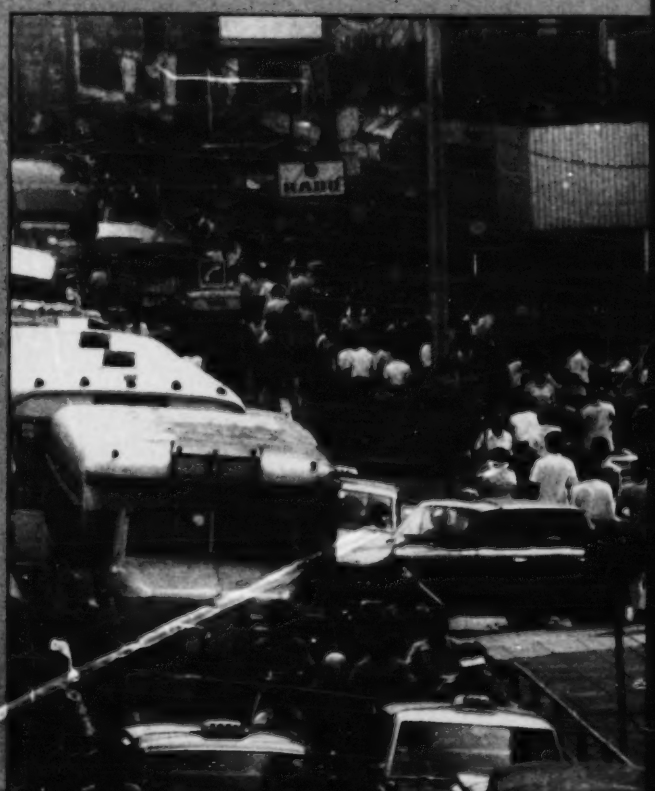
The primary health care approach and intersectoral cooperation combine to form the strategy of choice. As in the rural areas (which we have to safeguard from the threat of galloping urbanization), it is local action, situated firmly in a national, regional and even worldwide context, that has the best chance of succeeding in the great cities of tomorrow. Now more than ever, we have to "think globally and act locally."

The health authorities must convince the local powers-that-be of the important role of health in development matters, and must promote the right kind of leadership in the heart of the urban community to ensure the participation of everyone in health activities.

Health for All is our common objective, shared by us all. Not only can it lead us to greater equity and justice: it can also give the cities that human dimension on which their very survival depends.

Half of the world's population will live in cities by the year 2000. Pregnant women in particular must have access to health care facilities, like this mother-to-be in Tanzania. But how many will have that access?

WHO/P. Almasy



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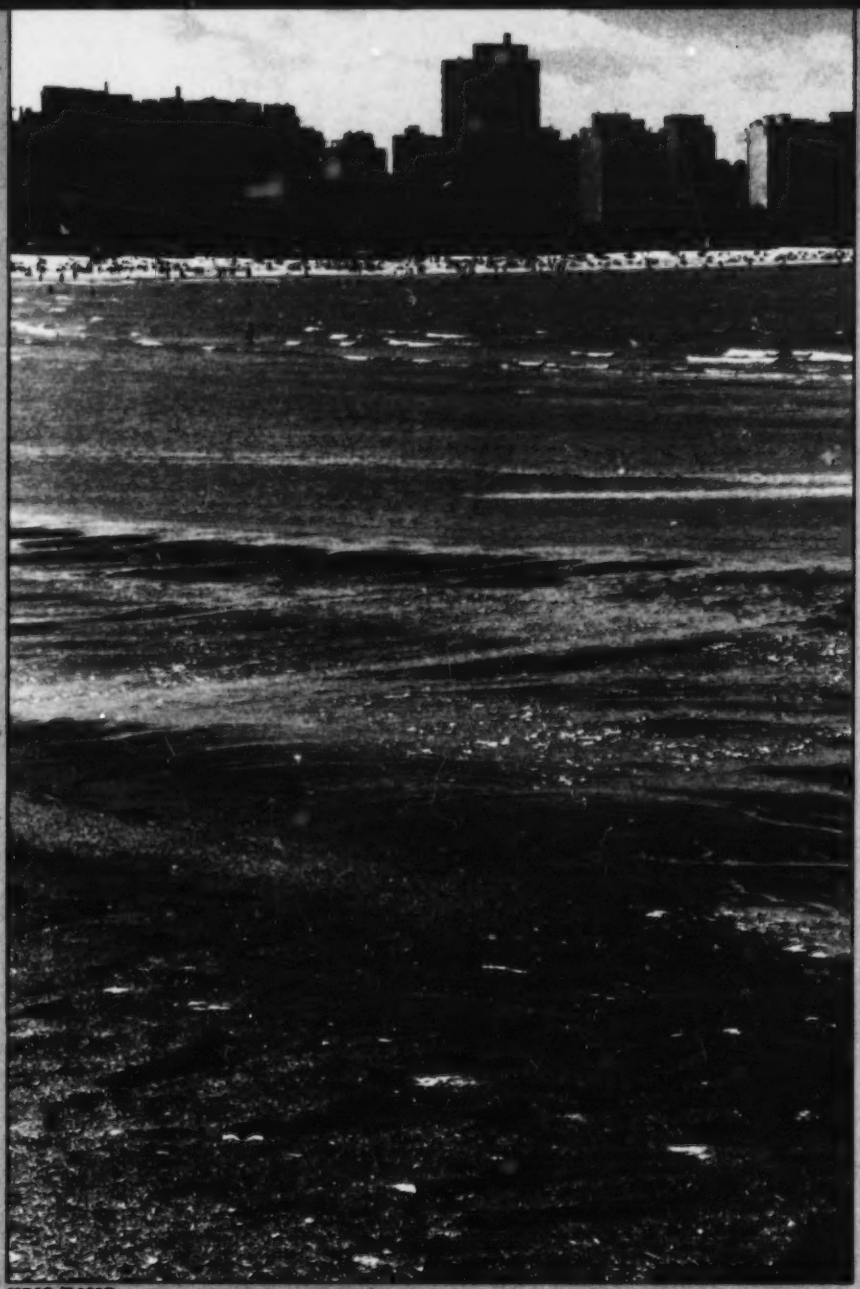


WHO/PAHO

Improving city environments is crucial for health. Above: Children playing in a working class area of Santiago, Chile, and Right: A site for sea-water treatment in Montevideo, Uruguay. Below: Heavy traffic clogs a street in Bangkok, Thailand. Below right: A literacy class in a Colombian village; most of the migrants to cities are helpless and ill-prepared when confronted with the highly competitive urban life.

WHO/P. Almasy

Immunizing the children of poverty

by Dr John Clements and Dr Diana Silimperi
respectively Medical Officer and Consultant with WHO's Expanded Programme on Immunization

By the year 2000, about half the world's children will be living in cities. Ensuring their immunization against the common childhood diseases is a major health challenge for the decade of the 1990s. If the children of the world are to be immunized properly, we must not neglect the millions of youngsters living in the poor areas of the world's cities.

The growth of cities is unfortunately more than matched by a disproportionate growth of the urban poor sector. Today as many as 100 million children live on the streets of large cities. Yet active search for them and immunizing them have often been given a low priority. Systems for data collection or service delivery to this group are not well developed, so there is little available information about their immunization coverage and the incidence of disease. As a result the problem has rarely been fully understood by the health authorities.

Literacy programmes

Experience has shown that it is a good investment to allocate resources which assist the urban poor to help themselves. Literacy programmes are relatively inexpensive and enable the urban poor to participate at all levels of planning. Nonetheless, special communications materials need to be developed for illiterate or poorly educated individuals. Such specially created materials help to overcome the barriers that these people often face.

Managers of Expanded Programmes on Immunization (EPI) know that the deprived sections in the cities are often poorly served and remain a reservoir for the circulation of such diseases as measles and poliomyelitis. In these crowded conditions, proper immunization coverage is therefore very important.

Some major cities in developing countries (such as Dhaka and Karachi) have been highly innovative in attempting to solve these problems and are setting an example to others. Increasing urbanization makes it vital that plans are made now which will involve realistic solutions to the problems of immunizing the urban poor. The alternative is to see hard-won gains in coverage levels over the last decade eroded by the global trend towards city growth. Uncontrolled urban population explosions pose a threat to the health of millions of people, but especially to children.

Local authorities may not willingly provide immunization services to politically powerless groups such as the urban poor, and may leave the task to voluntary organizations. Ideally these underprivileged groups should choose their own representatives to act as the voice of the silent masses, transmitting their needs to the decision-makers. Efforts to reach urban poor mothers

WHO/S. Vasco

WHO/P. Almasy

Literacy programmes, like those in Sudan, are relatively inexpensive, and essential if the urban poor are to participate in planning their own future. Left: A child receives life-saving polio vaccine in Singapore.

and children can only be successful and sustained if immunization programmes are integrated into community health programmes with full community participation.

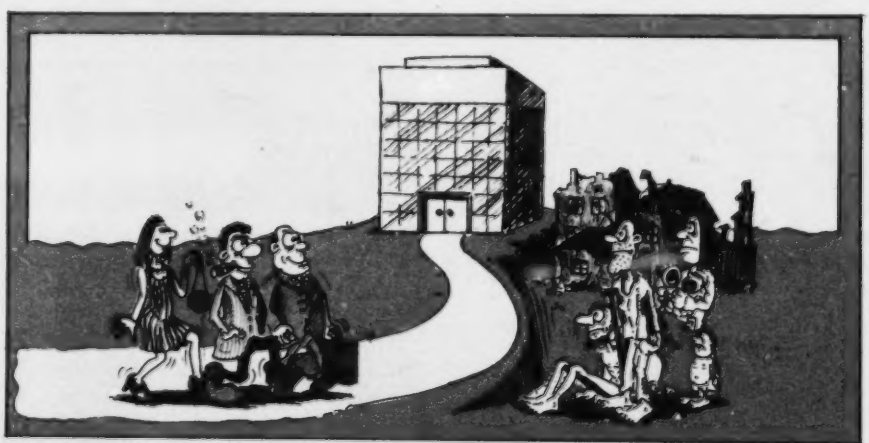
At the same time, national, regional and local government staff and resources, as well as nongovernmental organizations, also need to be integrated. Regular channels of communication are essential for information exchange and planning between the different sectors, and among the various parties within these sectors.

In order to ensure that solutions are appropriate and will be well received by the urban poor, more information needs to be obtained about their attitudes, knowledge, fears and obstacles to their use of the services. This will call for well-targeted surveys to collect data about health status and attitudes, as well as up-to-date – preferably computerized – methods of analysing such information. This may not be easy in such highly mobile and unstructured environments.

Because the roots of poverty are manifold, the barriers to using such health services as childhood immunization cannot be overcome or sustained by taking too narrow a view. Furthermore, solutions and long-term success can only be achieved through well-integrated immunization programmes which take into account all the

Poor people in the cities are usually grossly underserved with immunization and other health services. The gap between rich and poor shows no sign yet of narrowing.

WHO's Expanded Programme on Immunization urges national and municipal programme managers to develop action plans to reach urban populations which:
- define the target high-risk populations;
- provide for coordination of the many agencies (governmental and nongovernmental) which are frequently engaged in providing health services;
- provide outreach services, planned in collaboration with individuals from the target groups;
- encourage the development of training materials adapted to urban realities;
- allow for monitoring systems to assess coverage of health services and the incidence of disease among the urban poor;
- ensure that existing health facilities provide immunization services;
- promote the formation of urban immunization committees to guarantee the necessary political support for improving services;
- enlist the active participation of private physicians, who are an important but neglected resource in urban areas.



WHO cartoon by Claude Krebs

WHO/UNICEF/R. Mera

Lining up to register children for immunization in a slum area of Bucaramanga, Colombia.

Population projections (in millions) for the year 2000 of the world's 49 largest cities, ranked according to their size in 1985.

Tokyo/Yokohama (Japan)	21.32
Mexico City (Mexico)	24.44
New York (USA)	16.10
São Paulo (Brazil)	23.60
Shanghai (China)	14.69
Buenos Aires (Argentina)	13.05
London (United Kingdom)	10.79
Calcutta (India)	15.94
Rio de Janeiro (Brazil)	13.00
Seoul (Korea, Rep. of)	12.97
Los Angeles (USA)	10.91
Osaka/Kobe (Japan)	11.18
Greater Bombay (India)	15.43
Beijing (China)	11.47
Moscow (USSR)	10.11
Paris (France)	8.76
Tianjin (China)	9.96
Cairo/Giza (Egypt)	11.77
Jakarta (Indonesia)	13.23
Milan (Italy)	8.74
Teheran (Iran, Islamic Rep.)	13.73
Metro Manila/Quezon City (Philippines)	11.48
Delhi (India)	12.77
Chicago (USA)	6.98
Karachi (Pakistan)	11.57
Bangkok (Thailand)	10.26
Lagos (Nigeria)	12.45
Lima/Callo (Peru)	8.78
Hong Kong (Hong Kong)	6.09
Leningrad (USSR)	5.84
Madras (India)	7.85
Madrid (Spain)	5.42
Dhaka (Bangladesh)	11.26
Bogota (Colombia)	6.94
Baghdad (Iraq)	7.66
Naples (Italy)	4.46
Santiago (Chile)	5.58
Philadelphia (USA)	4.33
Shenyang (China)	5.50
Pusan (Korea, Rep. of)	5.82
Detroit (USA)	3.92
Bangalore (India)	7.67
Rome (Italy)	3.82
Sydney (Australia)	4.06
Caracas (Venezuela)	4.79
Wuhan (China)	4.47
Lahore (Pakistan)	5.93
Katowice (Poland)	3.88
Guangzhou (China)	4.49

* Based on data presented in "The Prospects of World Urbanization." Revised as of 1988, Population Studies, No 112, ST/ESA/SER.A/112, New York, 1989.

factors that contribute to the poor health of the urban poor.

So it is important to have an input from a wide range of personnel including health providers, urban planners and engineers, from the planning stages through implementation to evaluation. These individuals often have to make critical decisions about the location of a particular facility or its design. They may be responsible for creating road systems, for instance, which will be vital for improving access to a health facility, or for installing water and sanitation facilities which may improve the overall health environment.

Women volunteers

We have found that the best representatives from among the urban poor to be involved in planning and carrying out immunization projects are local women who volunteer their services. Since, by definition, these women come from the recipient communities, they can provide critical missing information about attitudes, perspectives, and responses to the immunization messsage. They know their communities' limitations and what is reasonable or feasible within the constraints of their home environments.

They can be more effective motivators because they speak the language of the people. And they can transmit basic information more successfully because they are trusted members of the community and can easily overcome social barriers that might otherwise block communication. They are also adept at chasing up defaulters – parents who fail to bring their children for the next round of immunizations.

However, it is important to generate considerable enthusiasm from the start if the number of volunteers is not to dwindle after the first excitement of a new programme dies down. Women are often very flexible and receptive to new ideas, and very willing to provide the service to their communities on a voluntary basis. They consider it sufficient reward simply to have improved access to knowledge, or to enjoy the increased self-esteem and status which stems from their participation in such a programme.

Problems sometimes arise because national, regional and local authorities, nongovernmental bodies and private practitioners may all be providing EPI services to urban populations. Such a diversity of responsibility often results in independent planning and carrying out of EPI projects with little cross-communication. Inconsistency and duplication can be avoided by creating an urban EPI steering committee with representation from all parties.

Politics are interwoven into the fabric of urban society, whether municipal, regional or national, and cannot be ignored. Even the setting up of routine immunization services can become bogged down in local politics, especially if the support of politicians has not been obtained beforehand. Conversely, the active support and involvement of urban leaders can help to provide the political will necessary to mobilize communities into action. ■

Housing and health

by Dr Roderick J. Lawrence
Centre for Human Ecology and Environmental Sciences of the University of Geneva, Switzerland

The meaning of *housing*, like the meaning of *home*, varies from person to person, between social groups and across cultures. Houses are commonly accorded an economic value, an exchange value, an aesthetic value and a use value – whereas, in addition to these, a home is usually given a sentimental and a symbolic value.

All these values, as well as domestic roles, routines and rituals, are not simply expressed by individuals; they are acquired, nurtured, transmitted, reinforced, or modified by interpersonal communication (for instance, between parents and children, or between members of the same social or professional group).

From this perspective, the interrelations between housing and health are very different when viewed from the resident's point of view. Trying to understand those viewpoints requires an approach that may be in conflict with arbitrarily defined solutions drawn up and applied by national governments or by international agencies. During this century, the practice of prescribing minimum standards for the quality of a wide range of environmental entities – air, water supply, and building materials, for instance – has led to a significant improvement in site planning, building construction and housing design in both industrialized and developing countries. Yet when these standards are examined in terms of their rationale and objectives, it becomes clear that they have commonly been drawn up with economic, technological and political priorities in mind, whereas the life-style, domestic economy, opinions and well-being of local populations have been largely undervalued or else ignored.

Studies of the housing conditions in large cities of both industrialized and developing countries today show that those people who do not have regular employment, who cannot afford to pay high rents or mortgage payments, and who need to live in urban neighbourhoods readily accessible to the job market, have the most unfavourable housing conditions. Although slum clearance has meant that vast numbers of unfavourable dwellings have been demolished, overcrowding has often increased, not by choice as some claim, but through economic necessity. These processes and their consequences are the crux of housing and health problems in many cities. In essence, the presence of substandard housing is not merely an architectural or technical planning problem but also, basically, an economic and political one explicitly related to the equitable and ecological use of natural resources.

WHO/R. Lawrence

Housing units built in Melbourne, Australia, in the 1950s. At that date, residents were given no opportunity to express their needs and aspirations when the houses were planned.

Few public or private institutions today bother to identify and monitor the costs and benefits of development policies, or the specific changes that may be brought about by projects for housing sites, communities or larger ecosystems, so that informed decisions can be made, costs and benefits correctly assigned, and negative impacts reduced or overcome. Most housing built during this century, and especially since the Second World War, did not benefit from this kind of approach, and the legacy for current and future generations is a grim one. For example, many housing units have been found to contain toxic building materials. Outside walls have inadequate thermal insulation, so they are hard to heat, and condensation and dampness favour the growth of mould or fungus. The indoor air quality often cannot be adequately regulated by cross-ventilation, and sound insulation may be lacking altogether.

Is it any wonder that respiratory illnesses and allergies have become a primary cause of morbidity and mortality in some European countries? Furthermore, new (or formerly unknown) diseases such as Legionnaires' disease have been identified. Room humidifiers, air ventilation systems and cooling towers, as well as hot and cold water supply ducts, have been found to nurture *Legionella* bacteria and transmit them throughout the indoor environment, or discharge them into the immediate vicinity of the building. An ecological perspective raises some fundamental issues. We could begin by asking why the water supply has become prone to bacteria; or ask whether it is necessary to install mechanical ventilation and air-conditioning systems in high-rise housing when it might be simpler to avoid constructing internal rooms that are devoid of both daylight and natural ventilation? Are there not alternative principles and practices for building construction and housing design even when high-density housing is unavoidable?

Man and environment

The ecological perspective not only raises fundamental questions of this kind, but it also enables us to draw up and apply alternatives. Some 2600 years ago, Hippocrates, a Greek physician who taught at a medical school on the island of Cos, maintained that human health and well-being are associated with a desirable state of equilibrium between the human organism and its surroundings. He illustrated this view by describing the living conditions of some populations in Asia and Europe. In order to better understand the health and life-styles of specific populations, Hippocrates refuted the commonly held beliefs in divine affliction and providence, and instead proposed an ecological perspective. He called for an examination of the impact of micro-climatic factors, biological organisms (both animals and plants) and inorganic entities (namely

air, soil, sun and water) on human health and well-being. Also he looked at different cultural and societal settings, especially in relation to food, leisure and work, in order to explain why people in various regions have different patterns of disease, health and well-being. In other words, Hippocrates maintained that it was not only the health of individuals or their immediate surroundings that needed to be considered, but also a thorough understanding of their daily circumstances.

Hippocrates' approach is appropriate for an understanding of the interrelations between housing and health. It can be complemented and enriched if the architect, the housing administrator or the public health officer ceases to be a passive observer and assumes the active role of an "enabler" who, in contrast to an "expert", is willing to integrate his or her explicit professional knowledge with the tacit know-how and experiences of lay people.

Public participation in the definition and management of housing is important for at least two reasons. Firstly, only by involving the community is it possible to establish a real understanding of the customs and values of people in their domestic setting. Where participation has been adopted, it often happens that certain basic institutional assumptions about housing and health have been proved incorrect. Secondly, public participation can be a useful form of public health education by increasing the awareness of lay people about the complex range of social, economic and political factors that are involved if we want to improve unhealthy housing and reduce homelessness.

Housing policies and public health rarely figure today in the manifestos of governments or political parties. It is not surprising, therefore, that we see many indications that all is not well, such as new human illnesses, increasing homelessness, and a declining quality of housing and human settlements in many countries. A fundamental change in human values and behaviour is necessary. This change can be promoted by a much better dissemination of knowledge, know-how and experience between professionals and lay people, and between the public and private sectors. The current worsening situation in the largest cities of both industrialized and developing countries must be seen as a challenge to the planners, because housing and health are fundamental anthropological concepts as well as basic human rights. ■

Chess playing in a Geneva park in Switzerland. The health and well-being of people depend to a large extent on the equilibrium they can maintain with their surroundings.

WHO/ A. Vaucher

Places for the soul

In a run-down neighbourhood near downtown San José, California, a unique architectural project is nearing completion. Al Diludovico is the executive director of Housing for Independent People, a non-profit agency committed to finding housing solutions for the disabled and the homeless. He says: "This particular project is important because it's the first and, as far as we know, the only shelter that was designed and built expressly for the homeless mentally ill. I think there is probably nothing more terrifying than not having a place to sleep. When it's getting dark and cold, and you look around for a spot to sleep, and the only place there is is the street."

This strong feeling was shared by Christopher Alexander, an American architect with a difference. He is a caring architect – one who believes that his role does not end with the completion of a drawing because, as he says, life does not come out of a drawing; life can only come out of a process, the process of building, in which everybody must participate and most particularly those who are going to use the building and to live in it.

Beauty and harmony play an important role in giving people a sense of belonging, just as old buildings did, whether they were vast cathedrals and palaces or a simple shack. And beauty and harmony can only be obtained with what Christopher Alexander calls "Wholeness": each part – even the smallest – of the whole is expressly designed and made to serve the same purpose as the whole itself.

In "Places for the Soul", a film produced and directed by Ruth Landy, a public information officer with WHO in Geneva, Christopher Alexander expresses forcefully that the only long-term chance for survival of man and his planet depends on his building harmonious relationships with his environment. There is still a long way to go before we can achieve this, and those who are trying to express this view in "concrete" terms are still only pioneers. Their voice needs to be heard at the highest political levels so that future policies are inspired by their achievements. ■

Mrs Christiane Viedma
Deputy Editor, *World Health*

Places for the Soul: the architecture of Christopher Alexander – a 29-minute colour film produced and directed by Ruth Landy – can be bought by calling (415)642-5578 or rented by calling (415) 642-0460 at the University of California Extension Media Center, 2176 Shattuck Avenue, Berkeley, CA 94704, USA.

Keeping a mental balance

by Dr Anthony J. Marsella and Dr Hugh Freeman
respectively Professor of Psychology, University of Hawaii, and Editor, British Journal of Psychiatry, *London*

Much as the pyramids of Egypt or the medieval cathedrals of Europe symbolized mankind's determination to rise beyond its own limits, so the present-day city symbolizes our impulse to pursue a social and collective existence. How is it then that so many cities have become such a fertile ground for crime, substance abuse, disease, demoralization, human insult and degradation?

More than 250 years ago, the Geneva-born Swiss writer Jean-Jacques Rousseau blamed society for being the cause of illness and disease; he said that, considering the sturdy health of the "savages" of his day, any history of civilized society would be equally the history of human sickness and disease. Nineteenth-century physicians added their voices to this as they claimed that insanity was part of the price we pay for civilization. This helped to popularize romantic notions about the benign nature of rural life and the noxious effects of city life.

Yet those who have actually lived in and studied rural societies have seen that they have never been free of stress and strain, and that village life may be cruel, violent, frightening and often degrading for human dignity.

Our views on the roles played by "civilization" and the city environment have to be balanced against all the various facets of urban, semi-urban and rural life. It is interesting to note that, among the many studies carried out on mental disorders, not one was able to find a really convincing difference in total rates of psychiatric disorders between urban and rural areas.

Mental ill-health

Many factors interrelate to create mentally unhealthy communities. In the cities of the developing world, at least 50 per cent of the residents, and in some cases even 80 per cent, live in extreme poverty. These urban poor are at very high risk of infectious diseases, chronic degenerative diseases, and also mental disorders and social pathologies; poverty, rather than city life in itself, is most likely to be the single greatest cause of urban physical and mental morbidity.

Some 50 years ago, severe mental disorders were studied in Chicago, USA. Conclusions showed that the greatest concentration of schizophrenic disorders appeared to be in the disorganized communities in or near the centre of the city. The authors of this now classic study explained that this was probably due to the social drift of schizophrenics into these areas.

As additional community psychiatric studies were conducted, it became clear that the distribution of mental disorders in cities corresponded to the concentration of poverty in city centres. Other studies indicated that the frequency of severe mental disorders, and in particular schizophrenia, were higher among the lower social classes.

More recent research shows that communities which lacked social and cultural cohesion (characterized by family and marital disintegration), and which had no social networks and associations, no community leaders, weak and fragmented communication networks, and high levels of hostility, had an increased risk of mental disorders. All this is more likely to occur in poor communities, whose members come from mixed cultural backgrounds and are often recently arrived migrants, and where social change is

The outskirts of New Delhi, India. Such monotonous surroundings leave little room for personal development.

rapid. Such a pattern is not necessarily urban, but is more often found in the cities.

In an effort to counteract the formation of slum areas, city authorities have tried to resettle people into better housing. In doing so, however, they have sometimes destroyed long-established communities with a culture of their own and with important social networks, without offering anything to replace them. The social support derived from these networks is of fundamental importance in maintaining good mental health and, in most cases, the provision of new houses did not remove the social problems.

Living on the margin

Many cities of the developed world have seen their centres emptied of their working class inhabitants, and their homes replaced by office space or used for shelter by a mixture of members of minority races and socially marginalized people such as alcoholics, drug addicts or those with marked personality disorders. This has led to the development, in many places, of communities with major social problems, particularly as the change has often coincided with economic decline and "de-industrialization."

Some cities have tried to solve the lack of adequate living accommodation by building countless high-rise residential blocks, and by forcing highways through to accelerate communication between different districts. In most cases these residential blocks were created without taking into account the wishes of the people who were going to live in them, thus creating dissatisfaction and the much talked about "inner-city malaise". As for the highways, they tore apart human-scale environments and fragmented them, giving way to segregated cells where movement was difficult, if not impossible, for anybody who was not equipped with a car.

Even in cases where planners and builders have made real improvements, for instance by reducing the population density or making better sanitation facilities, they have not been able to establish or preserve the kinship and mutual-help networks that existed in older communities. Most occupants of the new homes tended to place greater emphasis on their own domestic privacy to the detriment of social interaction.

This is partly due to the fact that local building styles and materials, as well as traditions, are abandoned to give way to monotonous streets of identical houses, with their nearby shopping areas, which are hardly designed to inspire community communication. The effects of reduced supportive ties tend to be greater in individuals such as housewives and the elderly who are not in regular contact with people outside the area. These groups are less likely to find adequate supportive relationships amongst neighbours, especially if they have not lived there for long. Certainly a greater prevalence of depression has been found in both working-class women and in the elderly.

Children and adolescents may also suffer from urban malaise, which is translated into depression, emotional disturbance, educational difficulties and family breakdowns, and often leads to extreme behaviour such as drug addiction or delinquency.

What conclusions can be reached that could improve the mental health of those living in cities? The "International hearing on achieving better living conditions in towns," held in Strasbourg, France, in October 1988, concluded that a mixed-use policy which combines housing, commerce and business could play a significant role in reducing urban delinquency and vandalism.

The meeting condemned housing policies based on demolition and rehousing of the inhabitants elsewhere, which tends to create a climate of tension and insecurity, and to provoke a breakdown of collective life. Architects too were judged to have a responsibility to produce a stimulating environment where individuality can be expressed, where there is a sense of belonging, and where places are created in which the residents are proud to live.

One proposal is that young people should constitute a priority target group for mental health promotion through the reinforcement of their social networks and the provision of greater psychosocial skills. This might particularly be done through the schools, which could act as focal points for developing a healthier mental life rather than just being institutions for imparting knowledge.

The question remains why so many choose to live in great cities and so many still wish to migrate to them in the face of all these problems. Is it the opportunity for wealth, for mobility, for freedom? Is it the appeal of excitement, new possibilities and even risk? The attractions of city life, particularly to the young, are manifold. Yet these attractions often exist alongside crime, substance abuse, hopelessness, exploitation, misery and suffering. Somehow these factors do not seem to matter to many town-dwellers.

We have therefore to look for ways of reducing the risks of mental and physical ill-health in cities whilst at the same time maintaining their attractiveness. ■

WHO/Zafar

Bangkok, Thailand, and young skinheads in Germany. Highways cutting through the city risk tearing apart the human environment, and contribute to "inner city malaise", a potential source of juvenile delinquency and vandalism. Young people are a priority target group for mental health promotion.

WHO/ILO/J. Maillard

High-density life in China

by Professor Chen Changhui and Dr Solvig Ekblad

Vice-Director, Institute of Mental Health, Beijing, China, and Coordinator of a Swedish-Chinese interdisciplinary project on housing and health in Beijing, based at the Department of Stress Research, Karolinska Institute, Stockholm, Sweden

What causes stress in cities is a subject of keen debate among psychologists, psychiatrists, sociologists, architects and city planners. These problems vary from country to country. The People's Republic of China, which accounts for one-fifth of the world's population, is at present undergoing urbanization and rapid social and economic development. How do people cope with life in the great cities of China?

Health care has made significant progress, increasing average life expectancy (at present 70 years) and reducing infant mortality, both of which trends tend to augment the population. At the same time, the family structure is changing as extended families give way to nuclear families. In addition, an enormous rural labour force is being transferred to the cities.

As a result, the urban housing shortage is now a serious problem. City planners and architects are under great pressure urgently to provide more housing. Two demographic factors are particularly relevant to the housing shortage. One is the large youthful population, and the other is the move away from agricultural occupations as part of the new economic strategy. China's emphasis on urban-based industrial development, on the one hand, and its efforts to restrict urban growth by controlling rural-to-urban migration, on the other, have made the Chinese experience of urban development unique.

These changes have profound effects on the people, especially on such vulnerable groups as children, the elderly and the disabled. But it is becoming clear that people reared in the traditional Chinese culture are likely to be more tolerant of high-density living and have lower levels of stress than people educated with Western traditions. The Chinese people have developed cultural norms and values which encourage the maintenance of harmonious relationships between man and nature, and which use various coping mechanisms involving space, time, status and emotional management.

China, which accounts for one-fifth of the world's population, is at present undergoing rapid urbanization. How do people cope with life in the great cities of China?

Less living space

A typical new high-rise building in Beijing is constructed of precast-concrete panels and floors. Outer walls have a "sandwich" panel construction, with the inner wall being made of light-weight insulating concrete. Openings for windows are provided in the panels at the factory, and the windows themselves have steel casements. Equipment in a typical apartment is spartan: water supply, two gas burners and a water-closet. The rest is up to the residents. There are normally two to three rooms, a small kitchen, a modern bathroom and a balcony. A three-room apartment occupies 38 square metres. The requirement, prescribed in the 1950s, for every inhabitant to have 20 square metres of green space has been slowly reduced to half of that. Urban residents in China do not have more living space around them than people in the countryside (15 square metres); the average living area per person is only six square metres, far short of popular demand. Apartments have central heating, running water, gas for cooking and are fully electrified. Shops, clinics and day-care centres are placed on the lower levels of these buildings.

Safety norms are liable to suffer from the high speed of the construction work. The heat-insulation of roofs and walls is usually insufficient, and for energy conservation the single-glazed windows are inadequate.

Articles about the consequences of building high-rise blocks appear frequently in the Chinese mass media. They note that although the hygiene facilities are much better compared to mid-rise and traditional courtyards, high-rise housing units are not necessarily a symbol of modernization and cause many problems. They spoil the skyline and environment of the city and increase the construction costs; the elevators do not always work 24 hours a day; there are not enough public playgrounds for the children, and there is much inconvenience for the elderly. Are Western mistakes

which resulted in adverse economic, environmental and other effects of high-rise building being repeated in China?

The *debate* continues – as does the construction of high-rise buildings. The Beijing administration recently announced controls on the scale of such buildings, yet they still constitute one of the main ways of meeting the tremendous demand for housing.

We believe that the Swedish-Chinese project we have recently carried out is the first interdisciplinary, epidemiological study in China with the primary objective of linking the information based on interviewing people about housing characteristics with the quality of life. Hitherto housing statistics have often been lacking or incomplete. More specifically, the project looks at family functions and the quality of life in relation to the three most common types of housing: the traditional but often primitive low-rise housing that has prevailed for centuries; the Soviet-inspired four- and five-storey apartment blocks from the 1950s; and recent high-rise apartments built under Western influence, mainly after the Cultural Revolution in 1976.

Housing questions

Our sample consisted of 125 three-generation households in the Western District of Beijing, and the interview questionnaires dealt with dwellings as well as social, sanitary and health conditions. Among the results were the following:

– Existing multiple dwelling units are usually designed for nuclear family requirements, and the educational level among the high-rise inhabitants seems to be above that of persons in other types of dwellings;

– People are more crowded than in developed countries, but the traditional living courtyard has less private space than multi-storey dwellings;

– Multi-storey homes are better equipped for cooking and personal hygiene, and have better access to public and social services, the high-rise blocks being closest to most of the city facilities;

– Stress levels are not correlated with age, sex, or life satisfaction but with the type of dwelling. The elderly in traditional houses report least satisfaction with living in the present outmoded, crowded dwelling, but are most satisfied with life. Coping with traditional Chinese life seems to be more difficult for those who live in modern apartments and results in a decreased social network and social exchange;

– Indirect signs of psychosomatic symptoms are an inability to sleep because of the noise, and concern about lack of privacy among young mid-rise dwellers;

– Adverse behaviours (such as excessive alcohol consumption) are quite rare;

– Children rarely show somatic and mental symptoms, but those who live in high-rise apartments spend significantly fewer hours outdoors in winter as well as summer, by contrast with children in multi-storey homes.

People reared in the traditional culture of China seem to be more tolerant of high-density living and have lower levels of stress than people educated in "Western" attitudes.

Cultural collectivism in China may be a defence against disease, because it promotes harmony within a community and between families. This coherence and the constant support given by caring relatives or friends act as a buffer against stress, decreasing the incidence of disease.

We concluded that both positive and negative effects arise from the three types of dwelling. The traditional courtyard home satisfies psychosocial needs (for instance, privacy, child-rearing and welfare of the elderly), while its structural conditions, the lack of modern facilities and safety features are disadvantages. Modern homes, on the other hand, seem to have a negative influence on psychosocial comfort. Can the experiences of Western industrialized countries help to open up a new approach to city planning in China that fits in with the Chinese cultural background? We believe this is possible. Ideally the dwelling environment should provide opportunities for establishing and sustaining constructive social relations. Those who plan and build homes must start from a *holistic approach*, by which we mean that people's symptoms and illnesses, with their causes and consequences, have to be appraised in both a medical and a psychological and social perspective. This approach suggests that the link between housing and health may be quite indirect, and that, unless the intervening processes are understood, changes in the physical structure of the housing alone may have no beneficial effect on health if they do not simultaneously have a beneficial effect on intervening factors. ■

The false lure of the city lights

by Dr Fredj Stambouli
Professor of Urban Sociology, University of Tunis, Tunisia

Today, on the eve of the 21st century, there is an irresistible urge for freedom in terms of politics, economics and human rights. But if this urge is to find expression in harmonious human development, a number of obstacles must be removed. One of the most serious of these is the chaotic expansion of our cities, which could seriously retard the development of most of the world. Huge numbers of people are gravitating towards the cities at remarkable speed, and the present century has witnessed the most spectacular transformation of the human habitat in history.

The planet's population has doubled since 1950. It will have doubled once again by the time the children born this year get round to worrying about their retirement. There will then be 10 000 million people on earth. How will they live together? The choices we make today will determine the answer to this question.

Rapid growth

More impressive still is the speed of urban expansion. At the beginning of the 19th century, only three per cent of the world's population lived in towns. By the beginning of the next century, more than half will be trying to survive in cities or in urban fringe areas. In three-quarters of the Latin American and African countries, the number of city-dwellers is increasing at the rate of ten per cent per annum. Out of the 10 000 million people mentioned above, more than 8000 million will be living in developing countries. Those are the countries where real control of urban expansion is most difficult to achieve; their populations, which will still be just as poor, will be better informed and therefore less likely to put up with their condition for long.

Urban expansion in the Third World may not necessarily be a force for development. In adverse circumstances it may lead to gross dependence on external food supplies, considerable non-productive expenditure and, what is worse, destruction of the social and cultural fabric and systems of solidarity, with dire consequences for the defence and survival mechanisms of the populations.

So it is not difficult to imagine what rapid, chaotic urban expansion without corresponding economic development might do to the daily life of the poorest and weakest categories of humanity, especially children and old people.

More than 1000 million men, women and children now are living in shanty towns, where living conditions and hygiene are appalling. In and around the cities, the shanty towns sprawl. In WHO's Eastern Mediterranean Region alone, Djebel Lahmar and Mellassine in Tunis, Ben Msik in Casablanca, the dilapidated Bab el Oued in Algiers, Al Thawra in Baghdad or Medinat Al Amwat (the city of the dead!) in Cairo – all of these represent vicious downward spirals of human misery.

WHO/P. Almasy

Millions of children today are growing up in conditions where they will never realize their physical and mental potential. In Greater Calcutta, India, an open drain brings risks of disease to the very doorstep.

Urban poverty is on the increase. In 10 years it will have outstripped rural poverty. The current economic crisis and structural adjustment policies have aggravated the situation. The minimum salary has fallen by at least 25 per cent in most developing countries. Health costs are covered less and less, yet demand for care has never been so high.

Worse to come

More than half the people in Third World cities live in conditions of obvious poverty. The proportion in Africa is 70 per cent. Things are likely to get worse, since it is forecast that the proportion of poor families in the year 2000 will be twice that of 1975: 77 instead of 35 per cent.

The situation of children in the world has considerably deteriorated, especially as a result of cuts in public health expenditure in the 1980s in most developing countries. Improvement of the health and nutritional status of children has slowed down or even stopped in many Latin American and African countries; in many other countries, child mortality and malnutrition have even increased.

In this context, UNICEF has sounded an alarm. It warned that millions of children today are growing up in conditions where they will never realize their physical and mental potential. This human tragedy carries the seeds of its own perpetuation.

In the least developed countries, one child in three dies before the age of five; 25 per cent of those deaths are associated with diarrhoeal diseases. Respiratory infections and nutritional deficiencies, which are part and parcel of life in urban fringe areas, are the two other main causes of sickness and death in young children. Since urban poverty shows no signs of slowing down, this situation will get worse. The World Bank has revealed that, in 1990, 85 per cent of the poor in Venezuela, 69 per cent in Mexico, and 75 per cent in Brazil live in urban areas.

Poverty is drifting inexorably from the land into the cities, and the aging of the population which is typical of the developed countries is already seen in poor countries, where it takes on unprecedented proportions in the cities.

In poorer districts of large cities, living conditions for all people are often deplorable.

There are already 300 million people in the world aged 65 and over, and the number will probably exceed 400 million during the next decade; a third of those people live in developing countries. This trend will be reversed in the Third World in the future, so it is estimated that, of 1200 million old people in the year 2025, 70 per cent will live in developing countries where, alarmingly, more leave the villages than stay, and where the towns are immense reservoirs of human beings trying to survive.

More and more old people are moving to the cities, either to follow their children who have found employment, or simply in order to survive. They are always to be seen on the outskirts of cities or in rundown inner cities, doing a multitude of odd jobs such as nightwatchman, car park attendant, pedlar, porter or temporary worker on government schemes – all of them living precariously. The lucky ones, those whose children have gone up the social ladder, become contented grandfathers or grandmothers, looking after their grandchildren and helping with the family.

All too often, their overall situation and their living conditions are deplorable, especially in poor districts. As WHO has said, in many Third World countries the old people follow the young into cities where they are obliged to struggle for survival in the big shanty towns. Worse still, they must fight for work in an area of mass unemployment. That is one of the most urgent problems, since almost 65 per cent of the world's population will live in cities in the year 2030. The prospects are indeed bleak.

That situation is aggravated by the dearth of social protection and by the weakening or even destruction of family solidarity. As noted in the UN's International Plan of Action on Aging, few governments have a plan of services to offer to old people, and only a quarter of developing countries have, or plan to have, research centres on gerontology.

Precious contribution

We believe that the key to a strategy for old people is to stop regarding them as dependants or assisted individuals, and to restore their full responsibility and autonomy. The idea that the increasing numbers of old people will pose insoluble problems arises from the assumption that they cannot play a useful part in the economic and social life of the societies in which they live. They are regarded as unproductive invalids. This bureaucratic perception is entirely false. We believe that old people, women as well as men, can make a precious contribution to the development process in general, as long as they are brought into that process as agents and not simply as beneficiaries.

More work must be done to ensure that old people can really contribute to the progress of their societies. More dynamic policies and programmes are needed to foster reciprocity between social protection and development, with explicit recognition that old people have a great deal of knowledge, experience and skill to offer in the interests of development. This is how to avoid bitter inter-generational conflicts and to go along the path of hope.

We must act to safeguard the planet and to ensure the survival of humanity. A global human development pact could be devised which would reverse the trends that have caused the flagrant injustices from which over 1000 million human beings – men and women, children and old people – now suffer, and would promote the kind of harmonious development that can restore dignity and hope to everyone. ■

NEWSBRIEF

Editor: Philippe Stroot

Mitigating the effects of Chernobyl accident

WHO's Executive Board which met in Geneva in January discussed the setting up of an international programme aimed at mitigating the health effects of the Chernobyl nuclear power station accident in April 1986. This is the first step in the development of a long-term plan of action which includes setting up an international centre for radiation health problems. The project is open to all interested Member States under the sponsorship of WHO, with the participation of other relevant international organizations.

Its two major goals are to keep to a minimum the health consequences of the accident and to develop guidelines for dealing with radiation emergencies which might happen in the future.

The proposed international centre would be based at the Research Institute of Medical Radiology in Obninsk, about 100 kilometres south-west of Moscow. Appropriate surveillance of the population affected by the Chernobyl accident (about 200 000 people were exposed to radiation during the recovery operations) requires the accumulation and organization of biographical, medical and dose data. Valuable experience has already been gained on ways of treating over-exposure, on evacuating large numbers of people and on the overall organization of the emergency response.

The Executive Board asked WHO's Director-General, Dr Hiroshi Nakajima, to prepare a report for the World Health Assembly in May in Geneva on the progress of the international programme, and on the preliminary moves and arrangements that would be necessary. ■

How does radioactivity affect health?

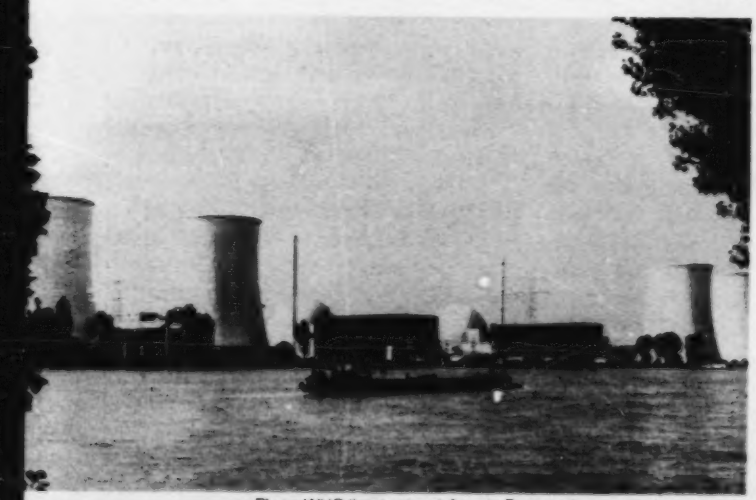


Photo WHO/International Atomic Energy Agency/Kraftwerk Union

Good quality drugs for West Africa

Representatives from the national health authorities of 20 West African states met last December in Lomé, capital of Togo, to share experiences and recommend ways of improving quality standards for pharmaceuticals. This unprecedented seminar was jointly organized by the International Federation of Pharmaceutical Manufacturers' Associations (IFPMA) and WHO's Regional Office for Africa.

The Lomé meeting is seen as a first step towards further collaborative action by WHO, the pharmaceutical industry and West African governments, aimed at improving the quality and access to health care for populations in need in the developing world. In particular, the countries represented are expected to benefit from having, as soon as possible, well-run quality assurance systems, including quality control laboratories wherever feasible.

Photo WHO/C. Stauffer

Drug quality control in Africa

In the presence of a number of officials from WHO headquarters in Geneva and from the African Regional Office, the participants adopted several resolutions in the context of pharmaceutical quality assurance for West Africa. They agreed that training must be continuous and adapted to existing facilities, preferably with expertise from the industry, whether on site or abroad in the drug-producing companies' facilities.

Basic quality control laboratories should be set up in all African countries; more sophisticated regional and sub-regional facilities might be necessary too, but only with clearly defined functions in relation to national laboratories.

The participants agreed that relevant and enforceable product registration and regulatory controls were the key to ensuring good quality control, while relevant legislation should reflect local conditions and resources, and should take advantage of the safeguards afforded by WHO's "Certification scheme on the quality of products moving in international commerce." They said that the counterfeiting of pharmaceutical products posed a major threat to public health in West African countries, and international efforts should be concerted to deal with this threat.

Finally, they stressed that the setting up and continuity of much-needed pharmaceutical quality control laboratories in West Africa would depend on strong political commitment and government willingness to allocate the necessary resources. ■

Why Lucky Luke stopped smoking

Ranilla was a famous Mexican caballero (cowboy) whose exploits in the early years of this century were fuelled by a high consumption of Caprichos, a "cigar of cigars" that "cooled down the throat" and rested it from the burning air of Vera Cruz. The comic strip was, as you might have guessed, sponsored by a local tobacco manufacturer.

Tintin, the little boy with a quiff drawn by Belgian cartoonist Hergé, was well in advance of his time when, in 1938, in *King Ottokar's Sceptre*, he retorted: "Thanks, I don't smoke."

But times had changed when, in 1983, the cowboy Lucky Luke replaced his cigarette with a wisp of straw. His creator Morris earned a medal from the World Health Organization for that important message.

In an incisive, and often funny, article in *World Health Forum* (Vol. 11, No. 1, 1990), Philippe Videlier and Pierine Piras examine how health matters are dealt with in strip cartoons. Using a wide variety of examples, starting from the end of the last century and spanning the world from Brazil to China, from Belgium to Zaire, they show that health may figure in strip cartoons in at least three ways:

– medical adventures or stories focused on a physician;
– health as an element of suspense, or part of the adventure;
– the depiction of ways of life.

That Dr Benjamin Justice should be a staff member of the World Health Organization might have surprised some of the readers of the cartoon Pif; the doctor's methods were not quite in line with those of WHO. The name was therefore changed to the fictitious "International

Health Organization," which gave the good doctor "greater freedom of action," as the authors put it.

At the other end of the scale we find the Pieds nickelés (The Layabouts), created in 1908 by Forton. They were a gang of tricksters who wandered far and wide, neatly hoodwinking their victims in every possible way. Their "Medico-Homeopatho-Therapeutic Institute" had as its main purpose to relieve patients of their savings, to the great amusement of the young readers.

Hergé once said that he did not think it possible to draw a strip cartoon about something as serious as disease. Disease is, however, frequently used as part of strip cartoon stories. Scurvy for example is, like storms and pirates, one of the sailor's enemies.

Photo WHO

Lucky Luke sets an example

Alcohol, tobacco, food and accidents are elements of many stories. Could depiction of a drunken character be seen as an advertisement for alcohol or of a smoker as approval of tobacco? Videlier and Piras think not. They conclude that "Neither good nor bad in themselves, strip cartoons – like any other form of culture and literature – are as varied as their authors and readers. This popular medium, has never ceased to attract young people, and it is, like any other medium with its own discipline, a vehicle of culture. With the emblematic figures of doctors, the archetypal scenes of hospitals or accidents, and the everyday scenes depicting living conditions, the strip cartoon tackles the vital theme of health in society and transmits the values of that period." ■

Newsbriefs

• **Collaborating centre in Viet Nam.** *The Central Institute for Medical Science Information (CIMSI) in Hanoi, capital of Viet Nam, was recently designated as a WHO Collaborating Centre under the health and biomedical information programme for Francophone countries. The Institute has been collaborating with both WHO headquarters and with the Western Pacific Regional Office (Manila) since 1984, and it has undertaken the translation of several newsletters and journals into French, Vietnamese and English. As a collaborating centre, it will help to strengthen the links between the Regional Office and French-speaking Member States in the field of health and biomedical information.*

• **UNESCO focuses on the cities.** *The January 1991 issue of UNESCO's popular magazine* Courier *is largely devoted to the problems of urbanization and the city environment. With the general title of "Cities under stress," the magazine looks at the major problems that will face the world's expanding cities in the 1990s and in the next century.*

• **Medical Schools.** *Two schools of medicine in South Africa were inadvertently omitted from the sixth edition of the World Directory of Medical Schools, published by WHO. They are: The Faculty of Medicine of the University of Orange Free State, P.O. Box 339, Bloemfontein (O) 9300; and the Faculty of Medicine of the Medical University of South Africa (MEDUNSA), Pretoria (T) 0001.*

• **Mental Health Week.** *Pakistan marked the period 9 to 16 December 1990 as Mental Health Week, coinciding with the 8th International Psychiatric Conference, attended by leading professionals from more than 60 countries. Arranged by the Department of Psychiatry at Rawalpindi General Hospital, a WHO Collaborating Centre for Mental Health Research and Training, the Conference included special workshops dealing with "the delivery of mental health services in developing countries," and with "poverty, illiteracy and mental health."*

• **Catalogue of disasters.** *The Panafrican Centre for Emergency Preparedness and Response in Addis Ababa, Ethiopia, has published a new Disaster Reduction Documentation Catalogue. The WHO/EPR documentation unit of the Centre has collected 3,040 articles and books dealing with disaster management, planning and training, as well as several hundred other articles on related subjects which have appeared in publications from all over the continent. WHO now possesses at the Addis Ababa Centre the only information management system in the world specializing in health aspects of emergency preparedness and response in Africa.*

• ***Cholera alert:*** *When a cholera epidemic struck Peru last February, the Pan American Health Organization — the WHO Regional Office for the Americas — coordinated emergency assistance. An epidemiologist was immediately sent to the area of the epidemic, and 100 000 doses of rehydration salts were made available to the Peruvian Government. A guide on cholera control was also provided to all Member States in the Region.*

• ***WHO in the Gulf crisis:*** *Since the beginning of the Gulf crisis, WHO has provided health assistance to Jordan, the Syrian Arab Republic, Turkey and the Islamic Republic of Iran. On 16 February 1991 a joint WHO/UNICEF humanitarian mission was sent to Iraq with the objectives of delivering a shipment of emergency supplies to assist in the care of children and mothers in all areas under Iraqi control, and ascertaining essential health care needs.* ■

In the next issue

Certain risk factors associated with lifestyles, such as alcohol and tobacco, induce a variety of diseases in both industrialized and developing countries. The May-June issue of *World Health* will describe the Inter-Health Programme, a global attack launched by WHO to counteract these factors. It will also describe how diabetes can be treated and prevented.

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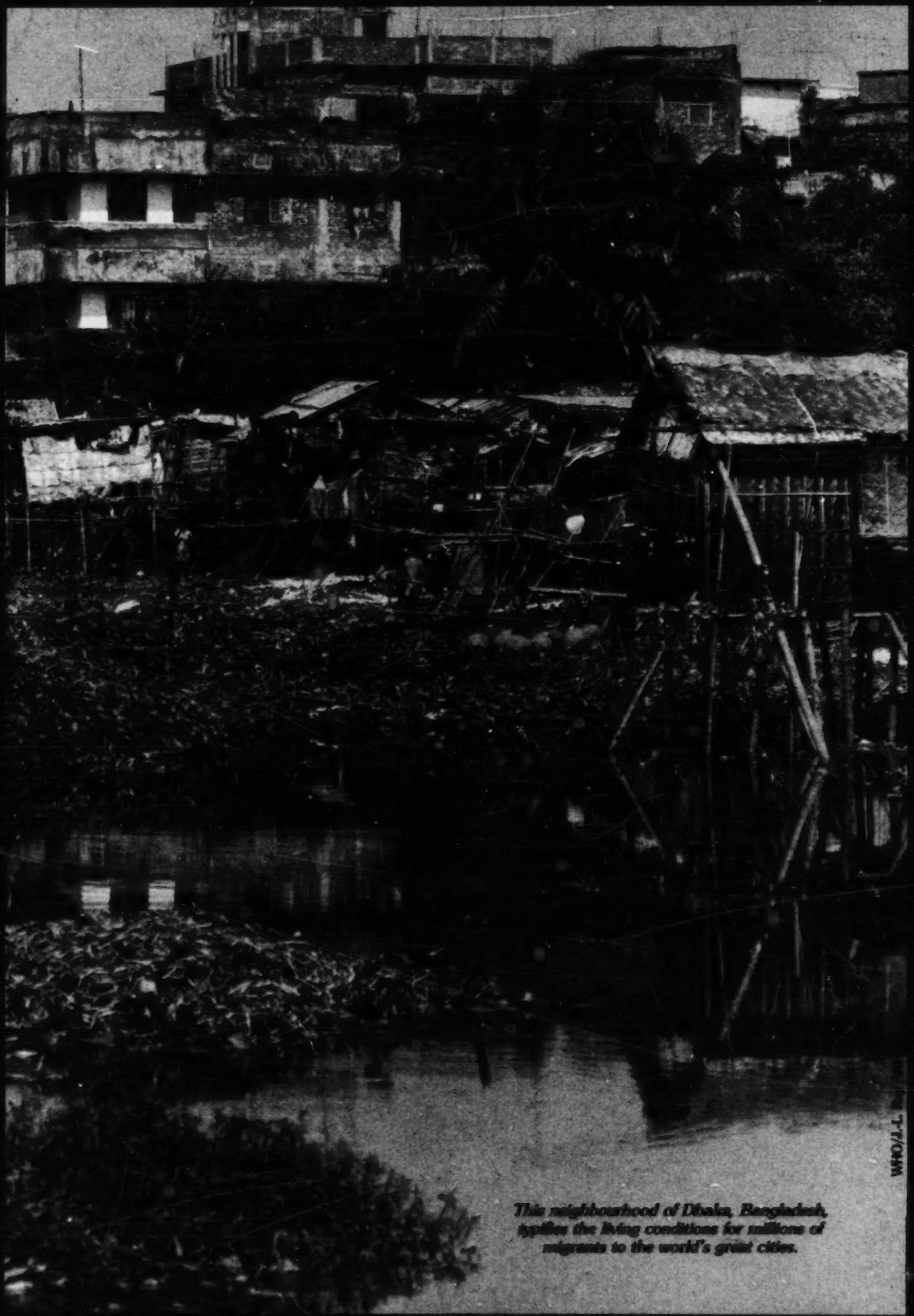

This neighbourhood of Dhaka, Bangladesh, typifies the living conditions for millions of migrants to the world's great cities.

WHO/J.-L.

Courtesy of the World Health Organization